

**CITY OF MOUNTAIN VIEW
MEMORANDUM**

DATE: January 22, 2009

TO: Council Environmental Sustainability Committee

FROM: Cathy R. Lazarus, Public Works Director
Joan Jenkins, Transportation and Policy Manager

SUBJECT: REVIEW AND APPROVAL OF COUNCIL ENVIRONMENTAL
SUSTAINABILITY COMMITTEE STUDY SESSION REPORT AND
ENVIRONMENTAL SUSTAINABILITY ACTION PLAN

On February 17, 2009, there will be a City Council Study Session to review the Council Environmental Sustainability Committee (CESC) recommendations regarding how the City should move forward on its environmental sustainability initiatives. Attached for review, refinement and adoption are the materials the CESC would forward to the City Council for the Study Session.

The first document is the Study Session report that describes the initiatives the CESC is recommending to the City Council for implementation through the remainder of the current fiscal year, as well as initiatives recommended for funding in Fiscal Year 2009-10. Second is a revised version of the longer-range Environmental Sustainability Action Plan incorporating CESC comments from your last meeting.

As part of our work over the last few weeks, staff developed preliminary cost requirements for the various initiatives identified by the CESC. In reviewing the attached materials and summary cost charts, staff is asking the CESC to confirm that all of these items should be recommended to move forward next year in view of the challenging budget climate.

Council Environmental Sustainability Committee

January 22, 2009

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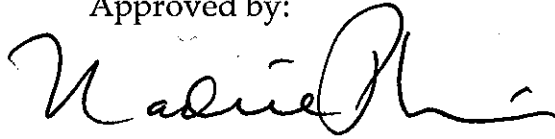
Based on the CESC actions, staff will finalize the February 17, 2009 materials for the City Council Study Session.

Prepared by:



Joan Jenkins
Transportation and Policy Manager

Approved by:



Nadine P. Levin
Assistant City Manager



Cathy R. Lazarus
Public Works Director

JJ/CRL/7/PWK
907-01-21-09M-E^

Attachments: 1. Study Session Report
2. Action Plan

cc: City Council

CM, ACM, PWD, ATCM—Woodhouse, TPM, ESC, F

DRAFT

**CITY OF MOUNTAIN VIEW
MEMORANDUM**

DATE: February 12, 2009

TO: City Council

FROM: Council Environmental Sustainability Subcommittee

SUBJECT: FEBRUARY 17, 2009 STUDY SESSION—PROPOSED ENVIRONMENTAL
SUSTAINABILITY ACTION PLAN

PURPOSE

The purpose of this Study Session is for the City Council to review and discuss the proposed Environmental Sustainability Action Plan (Attachment 1) developed by the Council Environmental Sustainability Committee (CESC) for implementation next year, subject to funding and staff capacity.

BACKGROUND AND ANALYSIS

In October 2008, the City Council accepted the final report of the Environmental Sustainability Task Force containing 89 recommendations outlining strategies and actions to conserve resources and reduce the community's carbon footprint. Subsequently, Mayor Tom Means appointed the three-member Council Environmental Sustainability Committee (Margaret Abe-Koga, Ronit Bryant and Chair Jac Siegel) to review the Task Force recommendations and develop an achievable, staged implementation strategy with the first phase to begin immediately and subsequent actions to be considered as part of the Fiscal Year 2009-10 budget process.

Since October 2008, the CESC convened four meetings to review and prioritize Task Force recommendations appropriate for early implementation, evaluate organizational capacity and estimate costs to begin new greenhouse gas (GHG) reduction and sustainability initiatives. Also, CESC considered other greenhouse gas reduction opportunities not addressed in the Task Force Report. From this review, the CESC is submitting the proposed Action Plan.

The proposed Action Plan should be considered the CESC's recommendation for the City's "road map" for strategic investment in environmental sustainability initiatives and should be reviewed and amended periodically to confirm the City's progress in

achieving its greenhouse gas reduction targets and in making the City more sustainable overall. In the future, the Action Plan can be modified to reflect new environmental regulations and additional Task Force recommendations can be implemented.

In bringing the Action Plan forward, the CESC recognizes it will be difficult to fund major new initiatives in the current economic climate and staff resources are fully committed to existing programs and goals. For these reasons and to maximize effectiveness, it will be important to leverage City resources by participating in regional sustainability initiatives for water conservation, solid waste reduction, transportation, green building and other efforts.

Public Participation

It is also important for the City to continue to encourage its extraordinarily committed residents, independent of City government, to develop ideas and strategies about how we as individuals, families, employees and employers take action to reduce our carbon footprints. Finally, the CESC recognizes that the General Plan process will likely be an important tool in reshaping the City for a more sustainable future. With these considerations in mind, the CESC recommends the following items from the Action Plan for implementation for the remainder of this year and for next fiscal year.

CONTINUING AND PROPOSED ACTIONS FOR THE REMAINDER OF FISCAL YEAR 2008-09

The action items below are proposed to continue through the end of this fiscal year and some will no doubt extend into the next fiscal year. Existing staff resources are generally sufficient to continue working on these initiatives, assuming the Environmental Sustainability Coordinator (ESC) position is continued for at least an additional year through June 2010. Associated implementation costs will be identified as staff begins working on the individual initiatives.

1. Adopt CO₂ Emissions Goals—The International Council for Local Environmental Initiatives—Local Governments for Sustainability (ICLEI) is contracted to calculate greenhouse gas emissions for the entire community and for City operations, which will be available this spring. GHG reduction targets will be recommended based on the outcome. This effort is already funded.
2. Redesign Water Billing Format—The Finance and Administrative Services Department is currently working with the Public Works Department on redesigning the utility bill format and expects to be finished by the end of the calendar year. The new format will display water usage and conservation information for residential and commercial properties. This is already funded.

3. Recruit and Train Water Conservation Advocates—The Public Works Department initiated this program by hiring an hourly employee to conduct water conservation outreach. This year, costs for two hourly positions are estimated at approximately \$30,000 and are funded by salary savings in the Water Fund.
4. Participate in the Single-Use Bag Ordinance Process—The Santa Clara County Recycling and Waste Reduction Commission (RWRC) is leading a regional effort with a draft model ordinance requiring merchants to charge customers for single-use paper or plastic bags. The RWRC, of which the City is a member, is asking all cities to comment on the proposed ordinance before moving forward. The Council will comment on the draft ordinance on January 27, 2009. Each city would act independently to adopt the ordinance if the RWRC proceeds. Costs to implement have not been determined but would be borne by the Solid Waste Fund.
5. Install Labeling on Recycling Bins in Public Areas—Place signs on trash receptacles downtown and in City parks stating "trash is sorted off-site" to inform users all materials are sorted for recycling. Cost is about \$750 from the Solid Waste Fund and can be funded in the current year budget.
6. Establish LEED Silver as the Standard for New City Facilities—The Council referred the Santa Clara County Cities Association request that all cities establish LEED Silver as the standard for public facilities to the Environmental Sustainability Task Force. The Task Force recommended LEED Silver as the standard for public buildings. The approximate additional cost to achieve LEED Silver is 0 percent to 2 percent over conventional building design and construction costs and would be included in the Capital Improvement Program (CIP) project budget for the individual projects. Additional design and construction costs are typically offset over time by reduced operating expenses. The CESC is recommending the Council convene a Study Session to discuss the topic before taking formal action on an LEED policy.
7. Support an Informal Green Citizens Action Team—Composed of volunteers from the Environmental Sustainability Task Force and others, the new group would be independent of City government and further the community's sustainability goals. The ESC would be the City liaison to the group. The cost is about 5 percent of the Environmental Sustainability Coordinator's time, currently funded from one-time funds.
8. Sponsor Sustainability Tabling and Outreach at Local Events—The volunteer Green Citizens Action Team can create educational materials and coordinate table

staffing at local events. About 1 percent to 3 percent of the ESC's time is needed, and there may be some cost to purchase educational materials.

9. Work with the Valley Transportation Authority (VTA) to Redesign Community Bus Route 34—City and VTA would work together to determine if there is a feasible alternative route to be implemented in the next fiscal year. VTA to fund; cost unknown.
10. Incorporate Climate Change Elements into the General Plan Update—The Community Development Department is leading the General Plan update with a major component, including strategies to address climate change through reducing greenhouse gases. A \$45,000 grant funded this item previously.

PROPOSED FISCAL YEAR 2009-10 IMPLEMENTATION ACTIONS

1. Continue the Environmental Sustainability Coordinator Position for One Year—Currently, the position is funded with one-time funds and is due to expire at the end of June 2009. The cost to continue the position for one year is \$155,000 from one-time funds.
2. Technical Assistance to Establish an AB 811 Benefit Assessment District and Develop a Financing Strategy—This legislation allows cities and counties to finance energy-efficiency and renewable energy installations on residential and commercial properties at the owner's request. It would be a potential major goal for next fiscal year with a CIP for technical assistance to develop financing options and establish a benefit assessment district.
3. Evaluate the Feasibility of Implementing a Municipal Renewable Energy Facility (AB 2466)—This legislation permits public agencies to install renewable energy generation facilities (wind, solar) of up to one megawatt per site to offset the cost of energy usage at other agency facilities. This item is a potential major City Council goal for next fiscal year; cost to be split 50 percent CIP reserve and 50 percent North Bayshore for a total of \$150,000.
4. Perform a Waste Characterization Study—This is the first step in developing a zero waste plan. The study would cost between \$50,000 and \$100,000 from the Solid Waste Fund to hire a consultant to conduct the study.
5. Fully Implement Bicycle Boulevards—The Council previously approved a system of bike boulevards for future implementation. Cost is about \$155,000 to \$250,000 for consultant assistance, including data gathering, design and installation, and would come from the CIP reserves.

6. Participate in a Regional Study to Provide Automated Bicycle Rentals—The City will join in a regional study effort led by the VTA. Study cost is borne by VTA.
7. Prepare, Adopt and Implement a Pedestrian Master Plan—City staff applied for a \$150,000 grant with a required City match of 20 percent (\$30,000) in staff time. The master plan would be prepared by a consultant and should take about 20 months to complete. It will be coordinated with the General Plan update.
8. Increase Free Arbor Day Trees—The CESC proposes to increase the total number of trees distributed per year from 100 to 300. The cost is about \$7,000 to \$10,000 for 200 additional trees, including administrative and delivery costs. Funds would come from the CIP Reserve and be placed in an existing CIP, Forestry Maintenance Program and Street Tree Replantings.
9. Environmental Displays at the Library—This action can be completed with \$4,000 to \$8,000 in one-time funding next year. Approximately 160 to 300 books and other materials can be purchased for this amount. One-time General Funds would be needed.
10. Evaluate Food Waste Composting Program and Explore Expansion—The City initiated a food waste composting program this year. To expand the program City-wide, an analysis will be required to determine demand, operations and rate impacts. A consultant will be needed at a cost of about \$100,000. Solid Waste funds would be used. Expansion of the program would be funded by the users.
11. Implement State-Mandated Landscape Water Conservation Program—When available, begin implementation of the State-mandated water landscaping conservation ordinance. Cost to be determined based on final language; funds will come from the Water and General Funds and may be partially offset by fees.
12. Retrofit City Facilities for Energy Efficiency/Green the Library—Retrofitting City facilities for energy efficiency will be an ongoing process requiring sustained investment of capital funds. At the direction of the CESC, City staff began evaluating potential actions to green the Library as the first facility in this process. A Pacific Gas and Electric energy audit has been requested and a Santa Clara Valley Water District water audit has been completed. Specific actions based on the two audits can be taken. Approximately \$140,000 in capital funds should be set aside as seed money for the Library for Fiscal Year 2009-10; this amount should be sufficient unless one or more major building system improvements are required and includes landscape changes on Franklin Street. This year, about \$85,000 will

be spent installing a new lighting control system for the Library and relamping the underground parking garage with energy-efficient lights.

13. Enhance the Expertise of Planning and Building Staff Members in Green Building Processes and Practices—The Community Development Department is evaluating its options for training staff. Training will begin early next fiscal year. Cost is estimated between \$7,000 and \$20,000 from one-time funds.

Greenhouse Gas Reductions

The implementation actions specified in this Action Plan will help reduce the City's greenhouse gases. Some actions, such as retrofitting existing public buildings with green technologies and implementing AB 811 (financing for property owners to make energy-efficiency and renewable energy upgrades) and AB 2466 (City-owned renewable energy facilities), will result in direct measurable reductions due to renewable power generation and energy-efficiency technology. Any reduction in energy and water use or waste generation will automatically produce greenhouse gas reductions. Other actions, such as outreach at local events and displays in the Library, will result in reductions that are not measurable since they affect the actions of others to an unknowable degree. However, these initiatives are also very important as they emphasize education and public information that lead to individual behavior changes, which are one of the most vital components of reducing emissions. A strong effort focusing on behavior change for all residents, workers and City employees will result in savings.

Since City operations and buildings only contribute between 2 percent and 5 percent of the total community's emissions, efforts to reduce the community's emissions will tackle a large part of the problem and have significant benefits. Reformatting the water bills, increasing water conservation outreach, supporting the Green Citizens Action Team and creating a zero waste plan will help encourage changes leading to community-wide reductions, but it will be difficult to calculate the reductions directly attributable to each initiative. Finally, offering free arbor trees to the community will directly eliminate CO₂ already in the air with the amount of reduction increasing as the tree grows.

COST/RESOURCE IMPLICATIONS

The current fiscal year is funded. The total cost for Fiscal Year 2009-10 ranges between about \$846,000 and \$998,000, including continuation of the Environmental Sustainability Coordinator position with one-time funds for one full year to lead many

of the initiatives. As proposed, the 2009-10 fiscal year will require additional funding in several areas as follows. (Grant funds received or pending not shown.)

One-time Funds	\$144,000 to \$148,000
North Bayshore	\$ 75,000
Solid Waste Fund	\$150,000 to \$200,000
Water Fund	TBD
CIP Reserves	<u>\$477,000 to \$575,000</u>
Total	\$846,000 to \$998,000

Table 1, attached below, shows the projects by fiscal year and the costs and funding sources.

CONCLUSION

It will be difficult for the City to make meaningful progress in implementing greenhouse gas reduction and environmental sustainability strategies without investment in additional capital initiatives and staff resources. Therefore, the CESC is recommending a program that balances participation in regional initiatives with investment in projects funded by City special funds (Water Fund and the Shoreline Community), grants and strategic infusions of one-time and capital funds. Finally, in facing the environmental and financial challenge, the City Council could pursue several funding approaches, assuming funds are available:

- Fund the environmental sustainability initiative on a year-to-year, project-by-project basis; or
- Adopt a two-year view and set aside a fixed amount of one-time discretionary funds (capital, General Fund, one-time), if available, focusing on the programs recommended by the CESC in this report.

NEXT STEPS

Based on the Council discussion at the Study Session, the next step would be for Council to further refine its desired environmental sustainability strategy in the upcoming goal-setting process, so a program will be ready for formal action as part of the budget later this spring.

FISCAL YEAR 2008-09 IMPLEMENTATION ACTIONS

<u>Action</u>	<u>Lead Dept.</u>	<u>Funding Source</u>	<u>Cost</u>
1. Adopt CO ₂ e* Emissions Goals	PWD	General Fund	Previously funded
2. Redesign Water Billing Format	FASD	Water Fund	Previously funded
3. Recruit and Train Water Conservation Advocates	PWD	Salary savings	\$30,000
4. Participate in the Single-Use Bag Ordinance	PWD	Solid Waste Fund	TBD
5. Install Labeling on Recycling Bins in Public Areas	PWD	Solid Waste Fund	\$750
6. Establish LEED Silver as the Standard for New City Facilities	PWD	Various CIP	0% to 2% over conventional building costs
7. Support a Community-led Green Citizens Action Team	PWD	General Fund	<ul style="list-style-type: none"> • \$0 through June 2009 • ~5% ESC** position beyond June 2009
8. Sponsor Sustainability Tabling and Outreach at Local Events	PWD	General Fund	<ul style="list-style-type: none"> • \$0 through June 2009 • ~3% to 5% ESC** position beyond June 2009
9. Work with VTA to Redesign Community Bus Route 34	PWD	VTA	\$0
10. Incorporate Climate Change Elements into General Plan Update	CDD	Grant	\$45,000

* CO₂e = Carbon dioxide equivalent.

**ESC = Environmental Sustainability Coordinator.

FISCAL YEAR 2009-10 IMPLEMENTATION ACTIONS

<u>Action</u>	<u>Lead Dept.</u>	<u>Funding Source</u>	<u>Cost</u>
1. Continue the Environmental Sustainability Coordinator Position for One Year	PWD	One-time funds	\$155,000
2. AB 811 Benefit Assessment District	PWD	CIP Reserve	\$100,000
3. Evaluate Feasibility of Implementing a Municipal Renewable Energy Facility (AB 2466)	PWD	50% North Bayshore and 50% CIP reserve	\$150,000
4. Perform a Waste Characterization Study	PWD	Solid Waste Fund	\$50,000 to \$100,000
5. Fully Implement Bicycle Boulevards	PWD	CIP Reserve	\$155,000 to \$250,000
6. Participate in a Regional Effort to Study Feasibility of Automated Bicycle Rentals	PWD	VT A	-0-
7. Prepare, Adopt and Implement a Pedestrian Master Plan	PWD	Grant funds	\$150,000 applied for
8. Increase Free Arbor Day Trees	CSD	Add to existing CIP	\$7,000 to \$10,000 annually
9. Environmental Displays at the Library	Library	One-time funds	\$4,000 to \$8,000
10. Evaluate Food Waste Composting Program and Explore Expansion	PWD	Solid Waste Fund	\$100,000

<u>Action</u>	<u>Lead Dept.</u>	<u>Funding Source</u>	<u>Cost</u>
11. Implement State-Mandated Landscape Water Conservation Program	PWD	Water Fund and General Fund	TBD—based on final ordinance language
12. Retrofit City Facilities for Energy Efficiency/Green the Library	PWD	CIP reserves	\$140,000—each building will vary
13. Enhance Expertise of Planning and Building Staff Members in Green Building Processes and Practices	CDD	General Fund	\$7,000 to \$20,000

Jac Seigel, Chair
Council Environmental Sustainability Subcommittee

JS/JJ/8/CAM
907-02-17-09M-E^

Attachment

DRAFT

CITY OF MOUNTAIN VIEW
ENVIRONMENTAL SUSTAINABILITY ACTION PLAN

INTRODUCTION

This action plan outlines how the City will prioritize and focus its environmental sustainability efforts, with a major emphasis on reducing the City's greenhouse gas (GHG) emissions. Toward this goal, both "quick payback" energy-efficiency actions that will reduce the City's operational expenses and bigger, longer-term projects that will significantly reduce greenhouse gas emissions are recommended. The plan also sets forth actions that will establish the policy framework to inculcate sustainable practices in the community and City organization.

This plan begins implementation of the Environmental Sustainability Task Force recommendations. It represents "Version 1" of an action plan that will be regularly updated to address Task Force recommendations, other City initiatives and new regulatory requirements. Given the current economic outlook, financial constraints and limited organizational capacity, actions should be implemented incrementally as funding is identified with funds allocated to actions providing the biggest environmental benefit.

The plan is comprised of the following major category areas:

- Policy Framework—Outlines major areas in which the Council may want to develop a policy strategy.
- Potential Major Goals—Proposes major projects and initiatives to consider as part of City Council goal setting.
- General Plan Update—Describes how environmental sustainability elements will be integrated into the General Plan update process.
- Greenhouse Gas Reduction Targets—Provides the required steps for developing community-wide greenhouse gas reduction goals consistent with State requirements.
- Implementation Actions—Outlines specific actions to be implemented in Fiscal Years 2008-09, 2009-10, 2010-11 and beyond.

Policy Framework

The policy framework identifies policy areas that set the stage for achieving a sustainable community that conserves resources and reduces greenhouse gas emissions. Some of the focus areas are already in development or have been completed.

1. Greenhouse Gas Reduction Policy (*in development*)

The Global Warming Solutions Act of 2006 (AB 32) sets California State emissions reductions requirements (11 percent by 2010, 25 percent by 2020, 80 percent by 2050). The City will complete its 2005 base year community-wide and City operations GHG inventories by April 2009 and will establish reduction targets by summer/fall 2009 to support AB 32.

2. Green Building Policy—Public Buildings (*not under way*)

Buildings generate 48 percent of the GHG emissions in the U.S. and green building technologies can produce substantial operations and maintenance savings over the life of the facility. New City buildings and renovation projects over 5,000 square feet should achieve a LEED Silver rating with this level increasing to LEED Gold within five years. The approximate additional cost to achieve LEED Silver is 0 percent to 2 percent above normal costs with most additional costs recouped within one to three years. Thereafter, the City will realize ongoing operational savings from the green building technologies.

3. Green Building Standard—Private Buildings (*not under way*)

The vast majority of the buildings in Mountain View are privately owned. For the City to reduce its GHG emissions to any significant extent, private developers and building owners should be encouraged to build and retrofit to the highest feasible green building standards. Neighboring cities San Jose and Palo Alto have enacted similar measures.

4. Water Conservation Landscaping Ordinance (*in development*)

A State-mandated water conservation landscaping ordinance must be adopted by all jurisdictions by January 1, 2010. The model ordinance will require major new projects and relandscaping projects to develop irrigation budgets and plans consisting of water-efficient irrigation systems and drought-tolerant plant materials. The Public Works—Public Services Division will be taking the lead on this project and coordinating with other affected departments, including Community Development and Community Services. Based on the latest State draft, there will be increases in City operating costs as irrigation and landscaping plans must be reviewed and permitted by the City.

5. Recycled Water Ordinance (*completed*)

The City passed a Recycled Water Ordinance in October 2004. It mandates use of recycled water for irrigation in the North Bayshore where it is available and feasible. The system is scheduled to be on line in 2009 and there is potential to expand the system to Moffett Field and other parts of the City in the future.

6. Zero Waste Policy (*not under way*)

The City could develop a comprehensive, long-term zero waste plan with a goal of achieving a 90 percent diversion rate by 2021. The City's diversion rate is 72 percent. Increasing it to 90 percent would require development of an implementation plan and potentially significant funding over several years. The first step would be a waste characterization study at the SMaRT® Station to determine the City's mix of recyclables and garbage. A zero waste plan could be developed by a consultant based on the characterization study. Given the large scope of such an effort, a zero waste plan could also be a major goal.

7. Construction and Demolition Ordinance (*completed*)

The Council passed a Construction and Demolition Ordinance in September 2008, requiring 50 percent of construction and demolition debris to be recycled or reused. As part of a zero waste plan, the City could increase this diversion rate to 75 percent after experience with the existing 50 percent rate is evaluated for effectiveness in one to two years.

8. Environmentally Preferable Purchasing Policy (*completed*)

The Council passed an Environmentally Preferable Purchasing Policy in October 2008, incorporating environmental considerations into purchasing decisions. A handbook is being developed to provide guidance to City staff.

9. Single-Use, Carry-Out Bag Fee (*in development*)

A County-wide initiative is under way to develop a draft model ordinance to charge a consumer fee of \$0.25 on paper and plastic single-use, carry-out shopping bags. The model ordinance was released by the Recycling and Waste Reduction Commission (RWRC) for review and comment by the cities. The Council will comment on the draft ordinance on January 27, 2009. Based on the comments from cities and the County, the RWRC may ask cities to adopt the ordinance or amend the draft ordinance as appropriate.

Potential Major Goals

In conjunction with developing an environmental sustainability policy framework, the City should evaluate recently approved legislation and other important environmental elements for implementation as part of its goal-setting process, including:

1. Energy Efficiency and Renewable Energy Generation

As part of a long-term strategic sustainability plan and toward reducing its dependence on fossil fuels, the City should develop a long-range plan for generating as much of its energy as possible from local renewable sources (e.g., solar and wind) when feasible and cost-effective. Doing so would reduce the City's GHG emissions and energy expenditures in the long run. It would also serve to insulate the City from rapidly increasing and "spiking" energy costs. The City can investigate alternative funding sources such as Power Purchase Agreements (PPAs) which may enable the City to install and generate renewable energy at no cost to the City. AB 811 and AB 2466 are recently adopted legislation promoting energy efficiency and alternative power generation, described below:

- a. AB 811—This law enables a city to offer low-interest loans to property owners who implement energy efficiency and/or renewable energy projects such as insulation, double-pane windows, high-efficiency heating and cooling systems, and solar panels. Particularly in today's challenging economic climate, this legislation could provide the needed incentive for property owners to make upgrades to reduce energy use and greenhouse gas emissions. (Proposed for 2009)
 - b. AB 2466—This legislation provides cities the opportunity to generate renewable energy (e.g., solar, wind) at one municipal site and credit the power generated to selected municipal accounts. The energy created would be fed into the power grid. Prior to this law, cities could "zero out" the account where the energy was generated but could not receive PG&E credit for excess power produced. (Proposed for 2009)
2. Water Conservation—Due to the ongoing drought, a State-mandated requirement to reduce landscape water usage 20 percent by 2020 and the San Francisco Public Utility Commission's "Supply Assurance Limitation," the City will need to implement aggressive water conservation measures in conjunction with the Bay Area Water Supply and Conservation Agency (BAWSCA) and the Santa Clara Valley Water District (SCVWD). Although plans are evolving, it is clear the City will need to allocate additional resources to achieve the State and regional requirements.

3. Green Building Retrofitting—Overall, existing buildings outnumber new buildings by more than 100 to 1. For the City to meet its AB 32 emissions reduction goals and to reduce its operating expenses, the City should develop a plan and funding strategy to retrofit existing City buildings with efficient green technologies as soon as feasible. The City may also want to offer incentives for residents and businesses to do the same.
4. Zero Waste Plan—In line with neighboring cities San Jose and Palo Alto and to address the challenges inherent in achieving a 90 percent diversion rate by 2021, the City should have a long-term zero waste plan as a major goal toward developing a zero waste policy.

General Plan Update

Through the update process currently under way, incorporate GHG reduction and other environmental protection strategies into the General Plan so the City continues to make progress in achieving a sustainable community.

Greenhouse Gas Reduction Targets

Establish City operations and community-wide resource reduction goals (e.g., greenhouse gases, energy, water, waste) based on the following previously funded prerequisite actions:

1. City Operations GHG Emissions Inventory (*February-March 2009*)

Staff is collecting City facilities and operations data and, in conjunction with the International Council for Local Environmental Initiatives (ICLEI), will complete the inventory by February-March 2009.

2. Community-Wide GHG Emissions Inventory (*April 2009*)

The City began working with ICLEI in fall 2007, producing a community-wide GHG inventory in spring 2008. One portion of the inventory, the landfill CO₂e* emissions, seemed high so the City Council authorized staff to conduct a landfill "leak test" to get actual emissions data (Quarter 1—2009) and finalize the inventory with ICLEI. The final emissions inventory should be completed in Quarter 2—2009.

* CO₂e = Carbon dioxide equivalent.

3. City Facilities Audits (*ongoing*)

The City will continue to conduct energy and water audits of public facilities to identify employee actions to reduce usage of these resources and corresponding operational expenses.

4. Greenhouse Gas Reduction Targets (*summer/fall 2009*)

Following completion of Items 1 through 3, the City will work with ICLEI to establish appropriate greenhouse gas reduction targets. This will enable the City to meet the State's reduction requirements and reduce overall operational expenses.

Implementation Actions

The following actions are sorted by Fiscal Years 2008-09, 2009-10 and 2010-11 and beyond with an emphasis in the short term on "low-hanging fruit" actions, particularly energy efficiency and community outreach and education.

FISCAL YEAR 2008-09 IMPLEMENTATION ACTIONS

<u>Action</u>	<u>Lead Department</u>	<u>Funding Source</u>	<u>Cost</u>
1. Adopt CO ₂ e* Emissions Goals	PWD	General Fund	Previously funded
2. Redesign Water Billing Format	FASD	Water Fund	Previously funded
3. Recruit and Train Water Conservation Advocates	PWD	Salary Savings	\$30,000
4. Participate in the Single-Use Bag Ordinance	PWD	Solid Waste Fund	TBD
5. Install Labeling on Recycling Bins in Public Areas	PWD	Solid Waste Fund	\$750
6. Establish LEED Silver as the Standard for New City Facilities	PWD	Various CIP	0 percent to 2 percent over conventional building costs
7. Support a Community-Led Green Citizens Action Team	PWD	General Fund	<ul style="list-style-type: none"> • \$0 through June 2009 • Approximately 5% ESC** position beyond June 2009
8. Sponsor Sustainability Tabling and Outreach at Local Events	PWD	General Fund	<ul style="list-style-type: none"> • \$0 through June 2009 • Approximately 3% to 5% ESC** position beyond June 2009
9. Work with VTA to Redesign Community Bus Route 34	PWD	VTA	-0-
10. Incorporate Climate Change Elements into General Plan Update	CDD	Grant	\$45,000

* CO₂e = Carbon dioxide equivalent.

** ESC = Environmental Sustainability Coordinator.

FISCAL YEAR 2009-10 IMPLEMENTATION ACTIONS

<u>Action</u>	<u>Lead Department</u>	<u>Funding Source</u>	<u>Cost</u>
1. Continue the Environmental Sustainability Coordinator Position for One Year	PWD	One-Time Funds	\$155,000
2. AB 811 Benefit Assessment District	PWD	CIP Reserve	\$100,000
3. Evaluate Feasibility of Implementing a Municipal Renewable Energy Facility (AB 2466)	PWD	50% North Bayshore and 50% CIP Reserve	\$150,000
4. Perform a Waste Characterization Study	PWD	Solid Waste Fund	\$50,000 to \$100,000
5. Fully Implement Bicycle Boulevards	PWD	CIP Reserve	\$155,000 to \$250,000
6. Participate in a Regional Effort to Study Feasibility of Automated Bicycle Rentals	PWD	VT A	\$0
7. Prepare, Adopt and Implement a Pedestrian Master Plan	PWD	Grant Funds	\$150,000 applied for
8. Increase Free Arbor Day Trees	CSD	Add to Existing CIP	\$7,000 to \$10,000 annually
9. Environmental Displays at the Library	Library	One-Time Funds	\$4,000 to \$8,000
10. Evaluate Food Waste Composting Program and Explore Expansion	PWD	Solid Waste Fund	\$100,000
11. Implement State-Mandated Landscape Water Conservation Program	PWD	Water Fund and General Fund	TBD based on final ordinance language
12. Retrofit City Facilities for Energy Efficiency/Green the Library	PWD	CIP Reserves	\$140,000, each building will vary
13. Enhance Expertise of Planning and Building Staff Members in Green Building Processes and Practices	CDD	General Fund	\$7,000 to \$20,000

FISCAL YEAR 2010-11 AND BEYOND IMPLEMENTATION ACTIONS

<u>Action</u>	<u>Lead Department</u>	<u>Funding Source</u>	<u>Cost</u>
1. Create a Zero Waste Action Plan	PWD	Solid Waste Fund	\$100,000 to \$150,000
2. Participate in Regional Efforts to Ban Polystyrene Take-Out Food Containers	PWD	Solid Waste Fund	TBD
3. Retrofit City Facilities for Energy Efficiency/Building TBD	PWD	CIP Reserves	\$100,000

PROPOSED FISCAL YEAR 2010-11 AND BEYOND IMPLEMENTATION ACTIONS

1. Zero Waste Action Plan—Following completion of the waste characterization study, a consultant would be hired to prepare a zero waste plan which could cost about \$100,000 to \$150,000 with funding from the Solid Waste Fund.
2. Participate in Regional Efforts to Ban Polystyrene Take-Out Food Containers—This effort would be undertaken following completion and evaluation of the ordinance to charge for single-use carry-out bags. Cost to be determined from the Solid Waste Fund.
3. Retrofit City Facilities for Energy Efficiency—The City will select one or more buildings each fiscal year for energy efficiency and water conservation improvements, depending on the extent and cost of the improvements. A Pacific Gas and Electric (PG&E) energy audit and a Santa Clara Valley Water District water audit will be performed. Specific actions based on the two audits can be taken. Potential energy-saving measures the City can take include, but are not limited to, improvements to lighting, refrigeration, hot water and/or other systems, optimizing the operation of existing mechanical equipment and landscape watering and plant selection improvements. Each facility's costs will vary depending on the age and condition of the building and landscape plan.

CONCLUSION

In summer 2007, the City Council funded an environmental sustainability program focused on reducing the City's greenhouse gas emissions and operational expenses as well as improving the overall sustainability of the City. The Environmental Sustainability Action Plan provides leadership and a framework for achieving the City's short- and long-term sustainability goals.

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